

## **DEVELOP National Program**

### **2016 Spring Proposed Projects** *(tentative, subject to change)*

#### **NASA Center Locations**

##### **NASA Ames Research Center – Moffett Field, CA**

- Puerto Rico Health & Air Quality II: Developing an Early Detection and Vulnerability System to Assess Potential Dengue Presence in Puerto Rico
- Caribbean Oceans: Utilizing NASA Earth Observations to Detect Sargassum with an Early Advisory System in the Caribbean

##### **NASA Goddard Space Flight Center – Greenbelt, MD**

- Indonesia Agriculture: Preventing Rainforest Loss Through the Identification of Suitable Farmland for Palm Oil Agriculture
- Chesapeake Bay Water Resources: Investigating Factors Affecting the Distribution of Environmental Toxicants in Wildlife of the Chesapeake Bay Watershed

##### **NASA Jet Propulsion Laboratory – Pasadena, CA**

- Los Angeles Oceans II: Remote Sensing Detection of Wastewater Plumes to Assess Public Water Quality in Los Angeles County
- Bolsa Chica Eco: Tracking the Success of the Bolsa Chica Wetland Restoration using NASA Earth Observations
- Southern California Coastal Eco: Utilizing NASA UAVSAR Data to Determine Coastal Extent within Southern California

##### **NASA Langley Research Center – Hampton, VA**

- Arizona Health & Air Quality II: Enhancing Extreme Heat Intervention and Preparedness Activities in Maricopa County, Arizona with NASA Earth Observations
- El Salvador Eco II: Utilizing NASA Earth Observations to Develop a Historical Baseline Trajectory of Changes in Forest Cover and Degradation Indicators in El Salvador
- Texas Water II: Utilizing NASA Earth Observations to Monitor Drought Severity in Texas for Wildfire Mitigation Support
- CALIPSO Cross-Cutting: Developing Software to Further Assist Researchers in the Tracking and Identifying of Aerosols in the Earth's Atmosphere through CALIPSO Data

##### **NASA Marshall Space Flight Center – Huntsville, AL**

- Lake Victoria II: Utilizing NASA Earth Observations to Determine Change in Water Quality and Water Hyacinth Coverage Over Time for Lake Victoria
- Alabama Eco: Assessing Southern Pine Beetle Kill in the Bankhead Forest of Alabama Using NASA Earth Observations
- Texas Water: Utilizing NASA Earth Observations to Monitor the Changes in Groundwater Availability and Water Quality in Texas

##### **NASA Stennis Space Center – Stennis, MS**

- Southern Rockies Eco II: Utilizing NASA Earth Observations to Identify and Predict Suitable Mule Deer Habitats to aid Southern Rockies Landscape Conservation Cooperative in Habitat Conservation and Restoration Planning
- Coastal Mississippi Water: Utilizing NASA Earth Observations to Estimate Precipitation Runoff and Nutrient Loading to Support Mississippi Department of Marine Resources Estuarine Fisheries Conservation and Restoration Initiatives

#### **Regional Locations**

##### **USGS at Colorado State University – Fort Collins, CO**

- Colorado Agriculture: Mapping Beetle Outbreak Severity in the Nez Perce/Clearwater Region of Idaho
- Wyoming Eco: Mapping Migration Patterns and Critical Habitat of Mule Deer in Southern Wyoming

#### **BLM at Idaho State University GIS TRC – Pocatello, ID**

- Southeast Idaho Disasters II: The Effect of invasive Plants Relative to Catastrophic Wildfires

#### **International Research Institute for Climate & Society – Palisades, NY**

- New York Health & Air Quality II: Using NASA Earth Observations to Model Near Surface Air Temperature Profile of Complex Urban Systems Based on Land Surface Properties
- Uruguay Disasters: Deconstructing a Drought Severity Index Based on NASA Earth Observations to Better Understand the Driving Factors and Predictors of Drought
- Southeast Africa Disasters: Using NASA Earth Observations to Explore the Relationship Between Geophysical Variables and Flooding on a Regional Scale that Would Indicate an Increase in Flash Flood Risk

#### **Mobile County Health Department – Mobile, AL**

- Coastal Alabama Eco: Utilizing NASA Earth Observations to Map Historical and Predicted Extent of Marsh Habitats in Coastal Alabama to Support the Alabama Coastal Foundation's Restoration and Conservation Initiatives

#### **NOAA National Centers for Environmental Information – Asheville, NC**

- Miami & Honolulu Health & Air Quality: Utilization of NOAA's Aerosol Optical Thickness (AOT) Satellite CDR to Enhance the EPA's Airnow Air Quality Alert System to Mitigate Respiratory Health in Miami and Honolulu
- Cascades & Sierra Nevada Water: An Inter-Comparison of the PERSIANN and CMORPH Climate Data Records Over the Cascade and Sierra Nevada Mountains
- Levant & Central America Climate: Heavy Precipitation and Drought Monitoring and Precipitation in the Levant and Central America

#### **University of Georgia – Athens, GA**

- Southeast US Eco III: Utilizing NASA Earth Observations and Proximal Remote Sensing for Mapping the Spatio-temporal Distribution of Hydrilla
- Peru Climate II: Monitoring and Forecasting Shifting Climate and Land Change Impacts in Peru's Parque de la Papa for Enhanced Agricultural Management
- Atlanta Water: Identifying Key Urban Areas to Reduce Stormwater Runoff in Metropolitan Atlanta to Maximize Conservation Efforts

#### **Wise County Clerk of Court's Office – Wise, VA**

- African Great Lakes Weather II: Utilizing NASA Earth Observations to Identify Indicators to Help Predict Deadly Storms over African Great Lakes
- Wise County Disasters: Utilizing NASA Earth Observations to Help Estimate and Monitor Drought to Improve Crop Production in Arsi, Ethiopia
- Ethiopia Agriculture: Utilizing NASA Earth Observations to Identify and Predict the Extent of Flooding to Mitigate its Risks in Wise County, Virginia